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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,863	11/26/2003	Ian Robinson	NG(ST)-6508	8605
26294 7590 03/25/2008 TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 1300 EAST NINTH STREET, SUITE 1700 CLEVEVLAND, OH 44114			EXAMINER LEE, JOHN J	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 03/25/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/722,863

**Applicant(s)**

ROBINSON, IAN

**Examiner**

JOHN J. LEE

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27,30,32 and 34-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15,19-21,23-26,30,32 and 34-40 is/are allowed.
- 6) ☒ Claim(s) 16,17 and 27 is/are rejected.
- 7) ☒ Claim(s) 18 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's arguments with respect to claims 16, 17, and 27 have been considered but are moot in view of the new ground(s) of rejection.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 16, 17, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (US 6,563,806) in view of Kang (US 6,625,137).

Regarding **claim 16**, Perini teaches a plurality of base transceivers (BTS's) (104, 105), each BTS receives a primary uplink frequency and a transmits at a primary downlink frequency for communicating (Fig. 1, 3 and column 4, lines 29 – column 5, lines 25) as a primary BTS (104 or 105) with assigned mobile units (101-103), and each BTS unit being capable (an element is "capable" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense) as a secondary BTS (104 or 105) to monitor at least one additional frequency associated with an unassigned mobile unit (Fig. 7, 9 and column 6, lines 44 – column 7, lines 60). Yano teaches that a controller (106) that receives information from the plurality of BTS's (104, 105) based on signals each BTS receives from respective assigned mobile units (101-103) and at least one unassigned mobile unit (101-103) (Fig.

1, 3 and column 4, lines 29 – column 5, lines 25), the controller (106) providing a contingency plan that informs a given mobile unit of at least one selected candidate channel to communicate with in the event the mobile unit loses contact with the primary BTS (column 12, lines 34 – column 13, lines 49 and Fig. 15, 16).

Perini does not specifically teach the limitation “providing a contingency plan that informs a given mobile unit of at least one selected secondary BTS to communicate with in the event the mobile unit loses contact with the primary BTS”. However, Kang teaches the limitation “providing a contingency plan that informs a given mobile unit of at least one selected secondary BTS to communicate with in the event the mobile unit loses contact with the primary BTS” (column 11, lines 20 – column 12, lines 24 and Fig. 11, 12). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Perini system as taught by Kang, provide the motivation to improve performing handoff for communication contingency in wireless communication system.

Regarding **claim 17**, Perini teaches that the controller further comprising a combining unit for combining the data sent by each BTS to improve reception of the signal from the mobile units in the system (Fig. 1 and column 4, lines 29 – column 5, lines 25).

Regarding **claim 27**, Perini teaches that additional frequency comprises the primary uplink frequency for at least an adjacent one of the plurality of BTS's (Fig. 1 and column 4, lines 29 – column 5, lines 52).

*Allowable Subject Matter*

4. Claims 1-15, 19-21, 23-26, 30, 32, and 34-40 are allowed.

Claims 1-15, 19-21, 23-26, 30, 32, and 34-40 are allowable over the prior art of record because a search does not detect the combined claimed elements as set forth in the claims 1-15, 19-21, 23-26, 30, 32, and 34-40.

As recited in independent claims 1, 19, 30, and 40, none of the prior art of record teaches or fairly suggests that a controller comprises determining that at least one of no signal and an inadequate signal was received from the mobile unit, causing the primary BTS to stop transmitting during a time slot assigned to the mobile unit based on the determination, causing the contingent BTS to add the contingent carrier at a first downlink frequency, and causing the contingent BTS to send a signal on the carrier during the time slot assigned to the mobile unit, and together with combination of other element as set forth in the claims 1-15, 19-21, 23-26, 30, 32, and 34-40. Therefore, claims 1-15, 19-21, 23-26, 30, 32, and 34-40 are allowable over the prior art of records.

5. Claims 18 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose the limitation “the controller commanding one of a primary BTS and a secondary BTS to send soft handover data to a given mobile for controlling to which of at least the first and second BTS's the mobile unit should be connected based on the information received from the plurality of BTS's” as specified the

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claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee (US 6,393,003) discloses Semi-Soft Handoff Method That Uses Multiple Common Frequency.

Tiedmann, JR. et al. (US 2004/0184423) discloses A Dedicated Control Channel in an Early Soft Handoff in a Code Division Multiple Access Communication System.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231  
Or P.O. Box 1450  
Alexandria VA 22313

or faxed (571) 273-8300, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters, Alexandria, VA.

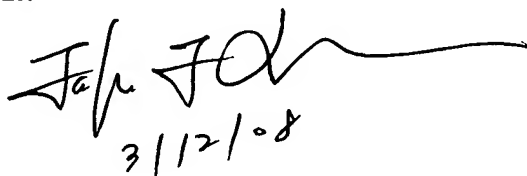
Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**.

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He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay Maung**, can be reached on (571) 272-7882. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L  
March 12, 2008

John J Lee



3/12/08